

**Chapter 8 Earthquakes and Earth's Interior****Section 8.1 What Is an Earthquake?**

*This section explains what earthquakes and faults are and what causes earthquakes.*

**Reading Strategy**

**Building Vocabulary** As you read this section, write a definition for each vocabulary term in your own words. For more information on this Reading Strategy, see the **Reading and Study Skills** in the **Skills and Reference Handbook** at the end of your textbook.


Vocabulary	Definition
earthquake	a.
fault	b.
focus	c.
epicenter	d.

1. Circle the letter of the approximate number of major earthquakes that take place each year.

- a. about 50                      b. about 75  
c. about 3000                  d. about 30,000

**Earthquakes**

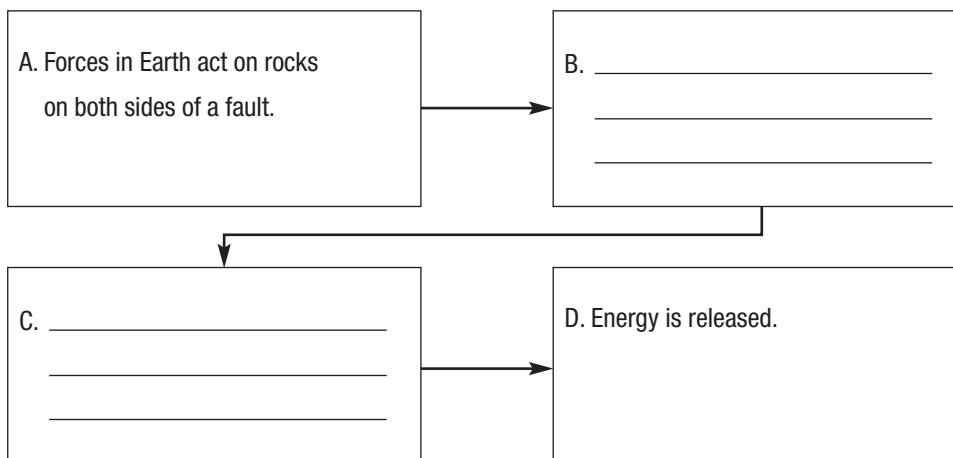
*Match each description with its earthquake feature.*

Description	Earthquake Feature
_____ 2. Earth vibration caused by rapid energy release	a. epicenter
_____ 3. energy that radiates in all directions from the earthquake origin	b. focus
_____ 4.  fracture where movement has occurred	c. seismic wave
_____ 5. surface location directly above where an earthquake originates	d. fault
_____ 6. location within Earth where an earthquake originates	e. earthquake

## Chapter 8 Earthquakes and Earth's Interior

### The Cause of Earthquakes

7. Is the following sentence true or false? It was not until after the 1906 San Francisco earthquake was studied that the actual cause of earthquakes was understood. \_\_\_\_\_
8. Complete the flowchart to show the sequence of events that occur when rocks are deformed along a fault.



9. The \_\_\_\_\_ hypothesis states that when rocks are deformed, they bend and then break, releasing stored energy.
10. What causes most earthquakes? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
11. Is the following sentence true or false? Most earthquakes occur along existing faults. \_\_\_\_\_
12. Circle the letter of small Earth movements that occur following a major earthquake.
  - a. foreshocks
  - b. slippage
  - c. aftershocks
  - d. foci
13. The \_\_\_\_\_ is one of the most studied fault systems in the world.
14. What is fault creep? \_\_\_\_\_  
\_\_\_\_\_